INDEX OF SURGICAL PROGRESS.

Extremities.

I. Amputation for Senile Gangrene. By Harrison Cripps, F.R.C.S. (London). A gouty, intemperate man, æt. 65 years, the subject of albuminuria and glycosuria, was attacked by gangrene of the toes, spreading to the foot. Antiseptic amputation in lower third of leg was quite successful. Gangrene appearing afterwards in the heel of the opposite foot was treated antiseptically, and healed slowly. The sugar entirely disappeared, and the patient also recovered from a large carbuncle.

Mr. Cripps believes that dry gangrene, while confined to the toes, may not uncommonly be arrested by proper treatment, *i. e.*, by encouraging the circulation of the limb, and using some dry deodorizer, together with stimulating diet and small doses of opium.

The flaps have sufficient vitality to heal if protected by antiseptic precautions from septic infection, and amputation is the proper treatment when the disease has spread to the foot.

Mr. Cripps does not think it necessary to amputate above the knee, provided that strict antiseptic precautions be adopted.—*Brit. Med. Journ.* 1885. May 9.

A. F. Street (Westgate on Sea).

II. Wrist-Ganglions. By Dr. R. Falkson. He gives fifteen cases (two in postscript) of their extirpation from the wrist. Antisepsis secured perfect preservation of function and, in all but two cases, absolute primary union despite the occasional opening of a tendon-sheath or joint. These ganglia often dip under the carpal ligament, and in the first thirteen, at least, extended to the joint-capsule; although in eleven cases there was demonstrable no communication between ganglion and articular cavity, and very likely none in the others. In the majority of cases the ganglion was more or less adherent to several tendon-sheaths.

Dorsal ganglia come up in most cases between the tendons of ext. indic. propr. and carp. radial. brev. Volar ganglia occur always on the radial half, so that in extirpating them it is at times necessary to tie the radial. He concludes, by exclusion, that these ganglions must develop from either *follicularesynoviparæ* (Volkmann) or subsynovial corpuscles (Henle, Gosselin, Teichmann).—*Arch. f. klin. Chir.* 1885. Bd. 32. Hft. I.

W. Browning (Brooklyn).

Wounds, Injuries, Accidents.

I. THREE CASES OF PISTOL-SHOT WOUND. By RICHARD BARWELL, F.R.C.S. London).

CASE 1. Shows that conical bullets, fired with great energy cause exceedingly little bruising.

CASE 2. Shows that oblique perforation of a lung, accompanied by much hæmorrhage and followed by hæmo-pneumothorax is not necessarily fatal.

CASE 3. Shows that a bullet may be successfully extracted from a depth of two inches from the margin of the external auditory meatus by means of trephine and gouge six weeks after its entry.

Even when the muzzle of the weapon touches the skin there may be neither burn nor powder-mark. (Report of Transactions of Clinical Society, London).—*Brit. Med. Journ.* 1885. April 4.

A. F. STREET (Westgate on Sea).

Genito-Urinary Organs.

EARLY SYPHILITIC EPIDIDYMITIS. By Mr. ARTHUR COOPER. A gentleman, æt. 21 years, having contracted syphilis four months previously, and being at the time under mild mercurial treatment, experienced slight swelling and pain in both testicles. There had been no urethral irritation for three years. Mr. Cooper found each globus major uniformly swollen, the other parts being normal. As mercury alone did not produce resolution, iodide of potassium was combined with it, and the swelling speedily disappeared.

This affection would appear at first sight to be more common in France than in England or the United States. Twenty-four cases were recorded by MM. Dron and Fournier, two only are mentioned by Berkeley Hill, Bumstead and Taylor refer to a few others. Probably were the epididymis carefully examined during secondary syphilis the lesion would be more often noticed, for the enlargement is slight and, as a rule, painless. It is important to remember that the globus major is often alone affected, whereas in gonorrhœal epididymitis it is the globus minor which bears the stress of the inflammation. It is interesting to note that the epididymitis came on at the time the patient was taking a mercurial course; the same thing being often seen in the case of secondary iritis, etc.—*Brit. Med. Journ.* 1885. May 30.

J. HUTCHINSON, JR. (London).

II. CALCULUS IMPACTED IN THE URETHRA OR PROSTATE. By L. G. RICHELOT. After touching upon their formation and recommending the bougie à boule in preference to a steel sound for diagnostic purposes, the author points out that there are three distinct methods of treatment open.

1. Direct extraction, limited to calculus in the penile urethra.

2. Pushing back the stone into the bladder.

3. Extraction through an external incision (la boutoniére). Concerning the direct extraction, instead of forceps, which are apt to rend and otherwise damage the mu-

cous membrane, M. Richelot recommends the use of the curette of Leroy d'Etiolles in the way laid down by M. Guyon, viz., the instrument being in situ, a wax bougie is pushed down to the calculus, adapting itself to the irregularities of the stone in such a fashion that it acts as a kind of lithotrite where the female blade is the curette and the male blade the bougie.

In cases where the stone occupies the membranous or prostatic urethra, pushing it back into the bladder should be tried first of all.

A case is related at some length where the author cut down upon an encysted prostatic calculus, and after having broken off several pieces, he succeeded in enucleating the rest of the stone, weighing 20 grammes, which, with the rest of the debris, made a total of 32 grammes. The patient, a young man, æt. 24 years, had suffered with his urinary organs since the age of 7 years. Perinæal lithotomy had been performed at 21 years of age. Death occurred about one month after the operation, and at the autopsy suppurative pyelo-nephritis of the right side, and abscesses in the left kidney were found.—*L'Union Médicale.* 1885. March 1.

III. Thermo-Electric Prostatotomy. By Prof. Bottini (Pavia). A man, æt. 68 years, consulted Professor Bottini for an enlarged prostate. There was mucopus in the urine which could only be voided by means of a catheter. Under irrigation of the bladder with solutions of boracic acid and sulpho-carbolate of zinc, the urine became clear and the bladder gained a little power. On July 5, the patient being under chloroform, the professor introduced his thermo-electric cauteriser into the bladder, and applied the cautery to the tumor. The instrument consists of a double channeled catheter. Within the inner tube are the isolated electric wires leading down to a platinum plate and heating it when the circle is completed. At the same time a stream of cold water circulates in the space between the two tubes and prevents the surrounding parts becoming heated.

In this case the burning was continued for 45 seconds. No fever followed the operation, and belladonna suppositories were used to relieve vesical tenesmus, a catheter being retained in the bladder.

After four days the catheter was removed, and the urine drawn off every six hours. The bladder was washed out with a 2 % solution of sulpho-carbolate of zinc. Micturition occurred naturally for the first time twenty-four days after the operation, but only in drops to begin with. About this time several sloughs came away in the urine. At the end of three months the act of micturition was normally performed and the urine was healthy. Six months after the operation the patient was in good health. It may be mentioned that great benefit was derived from the administration of nux vomica and the local use of an induced electrical current.

The operation causes but little pain, so that anæsthetics are only useful in hypersensitive patients.—*Gazzette degli Ospitali.* 1885. Feb. 11.

IV. Litholapaxy. By P. T. Freyer, M.D. During the space of two years and six months Dr. Freyer performed litholapaxy 111 times with only four deaths; two being due to exhaustion, one to peritonitis, and one to pyæmia.

The calculi removed varied in weight from 5 grs. to 3¼ ℥. There were fifty weighing ℥ss and upwards; twenty-seven, 1 ℥ or more; seven, 2 ℥ and upwards, and two over 3 ℥.

The debris of the largest stone crushed weighed 3¼℥, and was composed of uric acid. It occurred in a man, æt. 60 years, who had suffered with symptoms of vesical calculus for eleven years. The operation lasted sixty-six minutes, and the patient made a rapid recovery. Several patients of 80 years and over had large calculi removed successfully. In one case the subject was 96 years old, and the operation lasted one hour.

The author lays great stress upon the operation being completed in one sitting. He finds that old patients bear the operation much better than young men, and it is less likely to be attended with urinary fever.

Dr. Freyer agrees with Bigelow in the use of a large fenestrated lithotrite for large stones, and the employment of the largest canula that will pass with ease into the bladder. The larger the evacuating tube the less necessity there is for completely pulverizing the calculus; consequently, the more expeditious is the operation, a matter of importance where the stone is a large one and the patient worn out with much suffering. Again, small multiple calculi may often be removed through a large evacuator, without any crushing at all.

Finally, the author prefers the term of litholapaxy for this operation, as indicating a distinctly new procedure.

For males below puberty lithotomy is certainly the operation of choice.

Out of 132 cases of this operation in the author's hands, there was no death.—*Lancet.* 1885. March 7—14. F. S. EDWARDS (London.)

V. CONTRIBUTION TO THE OPERATION FOR VESICAL CALCULUS. By Prof. von DITTEL (Vienna). In a couple of articles early last year von Dittel brought the number of his calculus operations up to 350. In the present series of articles he gives fifty more, making a total of 400; besides sundry remarks on the relation of litholapaxy to suprapubic lithotomy—Sixty-nine cases of lateral incision, twenty-two of median, thirteen of suprapubic, 179 lithotripsies and 117 litholapaxies. The lateral operations and the lithotripsies were all included in his first 300, the litholapaxies in his last 300. The sectio-alta he has done five times for other purposes, making a total of eighteen suprapubics. Volkmann considers litholapaxy unsuited to our aseptic era; with this Dittel does not agree—except for those who have not the opportunity to acquire sufficient skill and confidence. Moreover, he is convinced that intelligent patients, *e. g.*, physicians suffering from calculus, prefer litholapaxy. In this operation the cure is also more rapid. Even with the greatest care, however, according to Dittel's experience, Bigelow's operation does not insure against relapse, but neither does the suprapubic operation invariably. Fragments may remain or an entirely new calculus develop. He gives the following case:

In a man who had been repeatedly examined by himself and others with a negative result, he at length, under narcosis, found a stone. This was cleaned out Dec

30, 1882. On May following he had to do litholapaxy again. Trouble began again soon. Median operation in October when he found five concretions the size of a pigeon's egg behind the enlarged prostate. A few months later it set in anew; operated through old cicatrix. Several small concretions besides a $3x2^1/_2$ centimetre stone. This time, as before, careful examination of the bladder with the finger. Relief at first, but only for six weeks. Operated once more, May, 1884, removed a phosphatic stone $3^1/_2x3x2^1/_2$ centimetres around a bit of cotton. How this came into the bladder could not be determined.

He considers the suprapubic the most perfect operation. Preliminary injection of the bladder has, however, twice in his experience led to rupture of a bladder diverticle. For the removal of certain foreign bodies, not otherwise extractible, he prefers the median operation. He decidedly opposes suturing after the high operation. In Nos. 23, 24, 25 and 26 his last fifty cases are carefully tabulated.—*Wien. Med. Woch.* 1885. Nos. 19 to 26.

VI. GALACTOCELE OF TUNICA VAGINALIS TESTIS. By Dr. HASHIMOTO (Tokio). A peasant, æt. 28 years, said to have suffered a contusion of scrotum four years previously, but without immediate pain or enlargement. Five days later some pain on walking and first swelling of scrotum, which has gradually assumed a large size. Scrotum now 32 | centimetres long by 22 centimetres in circumference. It looked like a hydrocele. Drew off a little whitish-yellow, milky, not transparent fluid, which showed fat droplets under the microscope, but no filia. Punctured then with trocar; 350 grm. fluid removed; iodine injected. Not seen again.—*Arch. klin Chirg.* 1885. Bd. 32, Hft. I.

VII. CONTRIBUTION TO THE QUESTION OF THE ORIGIN OF BILOCULAR HYDROCELE. By Dr. O. WITZEL (Bonn). The clinical history and method of treating hydrocele bilocularis abdominalis are satisfactorily understood, not so its origin and pathological anatomy. There is one available post-mortem examination, that of Lister. The most generally accepted and yet rather incongruous view is that, despite the relatively small resistance against extension downwards, and despite impediments, abdominalward, a scrotal hydrocele leads to a dilatation of the processus vaginalis as far as the internal inguinal ring and elevation of the peripheral peritoneum with the formation of a larger secondary abdominal tumor. Trendelenburg, a couple of years since, pointed out the improbability of this explanation, and indicated the probability of the sac being perforated, also a possible connection between this and retained testicle. W's case bears out Trendelenburg's views.

A man, æt. 42 years, was admitted on account of a large swelling in the left lower abdominal region. Corresponding testicle wanting. Three years previously he first noticed a swelling in the left groin. A truss was at first worn. In the last six months rapid increase in size. The pear-shaped tumor lay obliquely, its broad end outward as far as the spina ant. sup., reaching upward to within two finger breadths of the umbilicus and to the right over the median line. Fluctuation. A conical

process extended into the left scrotum was about the size of a goose egg, compressible, and became tenser on coughing. A bilocular hydrocele was diagnosticated. The occurrence of deep pain of late, and the absence of left testicle indicated possible malignant degeneration of said organ. Radical operation: Long incision parallel to Poupart's ligament. About 1 litre of brown-red clear fluid discharged. The sarcomatous testicle, size of fist, was narrowly attached to rear wall of sac; the latter was lined with serous membrane. Three pouches or recesses branched off; one posteriorly along the spermatic cord, one in inguinal canal, and a third toward the median line without any physiological analogue. Contra-opening in left scrotum for drainage. Cured in three weeks.—*Cent. f. Chirg.* 1885. No. 27.

W. BROWNING (Brooklyn).

VIII. NEPHRECTOMY, ITS INDICATIONS AND CONTRAINDICATIONS. By Dr. S. W. GROSS (Philadelphia). An analytical study of nearly four hundred and fifty cases of different operations on the kidney. The following conclusions are formulated:

1. That lumbar nephrectomy is a safer operation than abdominal nephrectomy.

2. That primary extirpation of the kidney is indicated; first, in sarcoma of adult subjects; secondly, in benign neoplasms at any age; thirdly, in the early stage of tubercular disease; fourthly, in rupture of the ureter; and lastly, in ureteral fistula.

3. That nephrectomy should not be resorted to until after the failure of other measures; first, in subcutaneous laceration of the kidney; secondly, in protrusion of the kidney through a wound in the loin; thirdly, in recent wounds of the kidney or of the ureter, inflicted in the performance of ovariotomy, hysterectomy, or other operations; fourthly, in suppurative lesions; fifthly, in hydronephrosis and cysts; sixthly, in calculus of an otherwise healthy kidney; and, finally, in painful floating kidney.

4. That nephrectomy is absolutely contraindicated; first in sarcoma of children; secondly, in carcinoma at any age, unless, perhaps, the disease can be diagnosticated and removed at an early stage; and, thirdly, in the advanced period of tubercular disease.—*Am. Journ. Med. Sci.* 1885. July.

Ulcers, Abscesses, Tumors.

I. THE PATHOLOGY OF RODENT ULCER. By F. T. PAUL, F.R.C.S. Mr. Paul classifies the different opinions concerning the true nature of rodent ulcers as follows:

1. As a variety of epithelioma—Moore, Collins, Warren; and as depending on the nature of the soil in which it grows—Hutchinson.

2. As a carcinoma of the sebaceous glands—Thiersch, Butlin, and others.

3. As a carcinoma of the sweat glands—Thin.

4. As a carcinoma of the hair follicles—Tilbury & Calcott Fox, Sangster & Hume.

The paper is based on the microscopical examination of twenty-two cases placed in the hands of Mr. Paul.

He assumes it to be generally admitted that rodent ulcer is a carcinoma of the skin; but to decide whether it is to be regarded as a carcinoma of the entire skin, or only one of the dermal appendages; and, if the latter, whether it is always an atypical growth of the same appendage, or whether it should be subdivided into carcinoma of each variety of appendage, he treats the subject under the following heads:

1. The minute structure of the growth.

2. What normal skin elements or other skin growths show any relationship to this.

3. Whether it has any special affinity for, or tendency to spread in, one particular skin structure rather than the rest.

4. Whether its remarkable localization to the skin of the face bears upon its origin.

5. Whether any microscopical evidence can be obtained as to its earliest formation —that is, the primary growth, not the marginal increase.

1. Rodent ulcer presents remarkable variability of growth, and it would almost seem as if few cases resembled each other, nor do they entirely, but there is a subtle uniformity of type traversing most of these varieties, which enables a practiced histologist to at once recognize the nature of the growth under the microscope.

2. Amongst all the carcinomata, rodent ulcer shows the least striking resemblance of any of them to a normal tissue. Rodent ulcer may be described as a carcinoma of the skin, showing very abortive attempts in its evolution towards the development of the dermal appendages.

3. Under the head of minute origin, Mr. Paul considers that what evidence there is points in the direction of its probable origin in the skin as a whole, and does not tend to associate it with any particular dermal appendage.

4. The localization of rodent ulcer and skin-adenomata on the face, he considers to be very strong evidence in favor of associating the origin of rodent ulcer with the glands of the skin.

5. In the smallest growths which he examined, some, even before ulceration had commenced, yielded no evidence of their minute origin, since in all of them the growth had gone entirely over to the cancerous stage.

Mr. Paul finally states his opinion that rodent ulcer is a chronic form of carcinoma of the skin, rather than a carcinoma of any special dermal appendage.

1. Because its structure varies greatly, and because in normal development the rete malpighii produce very various epithelial structures.

2. Because there are to be seen appearances in the minute structure of certain rodent ulcers, which resemble some points in the evolution of the several dermal appendages.

3. Because, also, there are points of resemblance between certain rodent ulcers and the innocent epithelial growths of the skin.

4. Because the general arrangement and type of the growth is like slow-growing epithelioma.

5. Because it passes insensibly into epithelioma.

6. Because its minute origin, so far as it can be surmised, is the same as in epithelioma.—*Brit. Med. Journ.* 1885. May 2. H. H. TAYLOR (London).

II. PARANEPHRITIC ABSCESS. By Prof. H. FISCHER (Breslau). All suppurations occurring in the tissues surrounding the kidney outside of the peritoneal cavity, are included under the term paranephritic. The disease is rare; it occurs more frequently in males, usually unilaterally, during middle age, and quite frequently in cases of abnormally developed kidneys.

Primary Paranephritic Abscess originates in the connective tissue immediately surrounding the kidney. It is analogous to phlegmon in other parts, and can be experimentally produced in animals. In man these abscesses are generally quite extensive, and the pus is under considerable pressure; they are situated between the diaphragm and iliac fossæ at the lateral terminus of the quadratus lumborum muscle.

The etiology comprises contusions in the region of the kidneys, and other mechanical injuries, penetrating wounds—especially bullet wounds, and sudden or repeated exposures. After acute infectious and septic diseases paranephritis has been repeatedly observed, and actinomycosis is undoubtedly a cause of recurring abscess in the lumbar regions.

The symptoms consist of pain in the back—generally constant in character and increased by direct pressure, by movements, coughing, etc., and sometimes radiating downwards; in a flexed position of the thigh, as in coxitis, and in shooting pains, neuralgia, anæsthesia, or even paralysis of the lower limb. A stiffness of the spinal column is the consequence of voluntary muscular action.

Fever is always present, generally continuous, with evening elevations, but frequently accompanied with rigors; or it is hectic in character, especially in the later stages. Debility, loss of appetite, vomiting and constipation are complained of. The urine shows no change; occasionally slight albuminuria, or even retention has been observed. Œdema of the lower extremities, or even ascites as well as dyspnœa and cyanosis, caused by the impeded action of the diaphragm, occur.

At the end of the second week a tumor may be noticed in the lumbar region, and may be felt from the front in narcosis. Later on the skin becomes involved in the inflammation, and thick, yellow pus may be obtained by paracentesis.

If these abscesses are not absorbed in the course of the disease, they may either perforate the skin of the back and discharge, or they may perforate the renal pelvis and the pus pass into the bladder. They may also perforate into the other organs—the pleuræ, the intestines, the liver, the lungs or the peritoneum, either into one or more simultaneously; or they may infect these organs by the pus being conveyed to them through the interstices of the connective tissue and produce suppuration.

Finally, these abscesses may tend to burrow downwards, most frequently along the

psoas muscle, or into the iliac fossa, and from there to the thigh or into the hip joint; very rarely do they descend into the lowest parts of the pelvis, or reach the bladder, the urethra or the scrotum.

Secondary Paranephritic Abscess is caused by infection from inflammations and suppurations in neighboring parts, either by perforation or by contact alone.

They may be due to purulent pyelonephritis caused by gravel, strongylus gigas, or by so-called surgical kidney (resulting from disease of the genito-urinary organs), and, perhaps, by action of cold; or to primary purulent nephritis and abscess of kidney, to tuberculosis or cheesy nephritis (nephro-phthisis), or, but very rarely, to suppuration of kidney-tumors and, probably, also to renal actinomycosis. Each of these possibilities is the subject of detailed consideration by the author.

The Diagnosis of paranephritis from empyema is facilitated by the thorax not being distended, the heart and liver not being displaced, and the signs of intrathoracic pressure not being recognized. Muscular rheumatism and tumors of the kidneys are not accompanied by fever. Abscess of the liver causes icterus and partakes of the movements of the diaphragm. Splenic tumors show an easily recognizable shape and abscess does not occur. Suppurating ovarian tumors lie in front of the intestines, are movable, and characteristic in form and appearance. Cysts are very rare in the para-renal tissue and may be diagnosed by aspiration. Similarly hernia should be borne in mind; they are rare, situated in the trigonum Petiti, and are easily replaced.

Of the various methods to enable one to estimate the condition of one kidney, when the other is known to be diseased, the author gives preference to Silbermann's, consisting in the introduction of a specially constructed catheter into the bladder and filling the attached rubber bulb with mercury so as to occlude one ureter, while examining the urine flowing from the other.

Complications of paranephritis are tuberculosis and amyloid degeneration; intestinal ulcerations have likewise been observed.

The prognosis of paranephritic abscess is not so bad—if timely surgical aid be procured. That of secondary abscess is, of course, the same as that of the primary disease. Death may occur through marasmus, uro-sepsis, pyæmia or uræmia.

The Treatment must meet three distinct indications: The development of paranephritic abscess should be prevented, discutient means should be employed in the first stages, and, as soon as an abscess has been ascertained to exist, surgical interference is called for.

Stones, when diagnosed, should only be removed from the kidney when hæmorrhages or severe attacks of renal colic seriously endanger the health of the patient. The author recommends a lumbar incision, opening the renal pelvis and carefully extracting the stone. He is not in favor of extirpation of the kidney for purulent pyelo-nephritis, but prefers nephrotomy, and only in case that this operation brings no relief, does he advise nephrectomy, and in this case, a long incision reaching from the lowest rib to the os ilii on the outer edge of the quadratus muscle, without resec-

tion of ribs. In case the capsule cannot be extracted, it is well to leave it, only enucleating the kidney.

If the kidney be found entirely degenerated, forming only a sac filled with pus or gravel, he advises suturing it to the wound and incising it.

Wounds of the kidney should be treated expectantly as long as possible, extirpation being only resorted to when suppuration has totally destroyed the organ. In cases of surgical kidney, where both kidneys are usually simultaneously affected, as well as in tuberculous disease, no severe operations should be undertaken.

Malignant tumors of the kidney should be removed from the front by abdominal section.

The second indication, the author believes, can not be successfully fulfilled; he, therefore, uses hot applications as soon as an abscess is diagnosed.

The operative treatment of an abscess fairly established must be begun as soon as possible. An incision is made six or eight centimetres from the spinal process, commencing a little below the twelfth rib, and the sac opened, the aperture being enlarged with blunt instruments or with the finger to prevent hæmorrhage, this method being preferred, generally speaking, to aspiration. In cases of downward burrowing of pus or secondary suppurations and empyema, these abscesses should be opened at the same time.

Fistulæ are frequently very difficult to heal definitely.

The treatment of secondary paranephritic abscess is included in that of the primary cause.

Nephrectomy may come in question here, as well, but should not be performed at the same time as the opening of the abscess, but at a later period.—Volkmann's *Sammlung klin. Vorträge*, No. 253. 1885. May 27.

III. CONTRIBUTIONS TO THE PATHOLOGY OF TUMORS. By Prof. F. WILH. ZAHN (Geneva).

1. The first of this series of papers on the subject of tumors treats of *multiple myeloma*, its proper classification and its relation to lymphatic anæmia. A case is given of a laborer, æt. 62 years, who presented deformities of the thorax, with tumors, and fractures of the ribs, and anæmia, general debility and emaciation, and who was treated at the Geneva Hospital under the care of Professor d'Espine for osteomalacia, at different times, during a period of five months. The post-mortem revealed multiple primary osseous tumors, some of which were situated at the places of fracture, most all the ribs and the sternum being fractured, and the spinal vertebræ softened. The internal organs were healthy, the lymphatic glands not enlarged. The urine was normal, as was also the blood.

The disease is due to an alteration in the marrow of the bones, resembling in nature the soft lymphosarcoma of Virchow.

Only two similar cases are reported in literature: One by von Rustitzky, and one by H. Buch, extracts from which are given. The former speaks of the tumors as myeloma; believes them to be non-malignant in character, representing simple hy-

pertrophy of the bone marrow, while the latter calls his case one of multiple sarcomatosis of the bones. The author, however, considers the tumors malignant in character, although multiple in their occurrence from the outset, and believes them analogous to the lymphosarcoma of the lymphatic glands and of the spleen.

The disease may be diagnosed *intra vitam* by means of the painful osseous swellings associated with general anæmia.

The author further adds three cases of lymphatic tumors, two published by Lannelongue and Rich. Schulz respectively, and one of his own, and concludes, after comparing them with his first case in question, that these latter ones represent the mixed form of pseudo-leucæmia, being associated with swellings of the lymphatic glands and tumor of the spleen, together with changes in the marrow of the bones, but that his first-mentioned case differs from these only in the absence of the splenic and lymphatic tumors—the alteration in the bone-marrow being in both cases the lymphosarcoma of Virchow.

The etiology is unknown. No bacteria were found. The anæmia is referred by the author to some inhibitory influence upon the development of the red blood-corpuscles due to the exuberant growth of the lymphatic elements.

2. The second paper, on a case of *primary sarcoma of the seminal vesicles*, illustrating at the same time a singular mode of metastasis of tumors, forms a valuable contribution to the latter subject.

Tubercle and carcinoma of the seminal vesicles being considered to be always secondary, the author publishes this case with very careful pathological anatomical notes. It relates to a gentleman, æt. 76 years, who was under observation for only eighteen days. He had no fever, except on admittance, when he complained also of pain in the lower limbs; his urine was normal, although he could not pass it freely, but only by constant dripping. There was no history of syphilis, and he had always been regular in his habits.

The post-mortem revealed sarcomatous tumors of the heart, the mesentery, the intestine, the renal pelvis and the right seminal vesicle, encroaching on the left one and on the prostate.

The latter tumor, in the author's opinion, is the primary one, because no metastases were found in the liver, and secondary metastatic tumors are not found in the seminal vesicles; moreover, the manner in which the left seminal vesicle and the prostatic gland were affected, as well as the presence of thromboses in the immediate vicinity, point to the primary affection of the right vesicle.

The fact that no metastases were found in the lungs is accounted for by the author by the presence of pulmonary emphysema, a tricuspid insufficiency and a persistence of the foramen ovale.

3. The author next describes *two tumors of the tongue*, occurring in a man æt. 40 years. The specimen having been accidentally found at anatomical dissection. Nothing is known of the clinical history of the case; no other tumors of the body had been found.

Each tumor measured about 15 millimetres in diameter, was round in shape and situated on the lateral edge of the back of the tongue. They consisted of fibrous tissue tending towards sclerosis, so that one was partially ossified; the surrounding connective tissue had become metamorphosed by hyaline and amyloid degeneration, perhaps, as a consequence of local impairment of nutrition. The case is compared with two others recently published.—*Deutsch. Zeitschr. f. Chirg.* 1885. May. Bd. 22. IIft. I and II.

IV. On the Occurrence of Cancer of the Rectum in the First Twenty Years of Life. By Dr. G. Schœning. While assistant at the Surgical Clinic of Rostock, the writer had an opportunity of observing two cases of cancer of the rectum occurring in young persons, which he publishes on account of the rarity of such cases in literature.

The first case was one of a girl, æt. 17 years, whose family was healthy. In her seventh year she suffered from rectal prolapse. In her sixteenth year the passages were bloody for about a month, and three months later constipation set in with occasional slight hæmorrhages. Two months later the dejecta became watery and were not under voluntary control. She was admitted to the hospital two months afterwards, in feeble condition, and complaining of pain in the abdomen and loss of appetite. The typical symptoms being found on examination, the diagnosis of rectal cancer was made; the upper terminus could be reached with the finger at the back, but not in front. Six days later the operation for extirpation of the rectum was performed. Some hæmorrhage occurred owing to the tumor adhering to the sacral bone; the peritoneum was not opened, however, nor was the vagina or the bladder injured; the intestine was drawn down and stitched to the wound, a piece, 10 centimetres long, having been excised. In the further course of the case, retention of urine occurred, a purulent cystitis set in; on the twelfth day a piece of the rectum, 6 centimetres wide sloughed off, and ultimately stenosis of the anus supervened.

Nearly two months after the operation coma and convulsions suddenly set in and death ensued, due, as the post-mortem showed, to uræmia caused by the impaction and compression of the ureters in the recurrence of the tumor. The microscope revealed a typical carcinoma.

The author believes that in the seventh year the patient suffered from adenoma, which subsequently turned into carcinoma, which developed in ten months.

The second case was also a girl, æt. 17 years. No heredity. Constipation occurred six months before admission, increasing subsequently. One month later the anal opening became callous, and after five months a growth was seen on the nates by the patient's sister. On admission to the hospital a tumor could be felt of the size of a man's fist, very hard, and encroaching on the pelvic organs, and affecting the inguinal glands. As the tumor could not be removed, the constricting tissues were divided; a portion removed proved the tumor to be an alveolar cylinder-celled carcinoma, partly undergoing cystic degeneration.

Subsequently, fever obtained, the tumor increased and ulceration set in.

Death occurred four months after admission, although not in the hospital.

In this case, the author believes, the tumor began to develop in the sixteenth year. Although it apparently took rise from the skin, yet the presence of cylinder-cells point to the rectal mucous membrane as the origin of the growth.

In addition to these two cases the author reviews five other similar cases already published, excluding all uncertain ones, and adduces statistical information from various authors.

As to etiology, the author inclines to Cohnheim's theory, believing that at the embryological period of union of the rectum and the anus, clusters of epithelial cells become disseminated and develop later by themselves.—*Deutsch. Zeitschr. f. Chirg.* 1885. May. Bd. 22. Hft. I. and II. W. VAN ARSDALE (New York).

V. CYSTIC TUMOR OF THE JAW. By A. C. BERNAYS, M.D. (St. Louis). Relates a case, with illustrations, of cystic tumor of the lower jaw occurring in a negro man, æt 20 years. The affected portion of the jaw was successfully removed, and the defect, remaining after healing, was very satisfactorily supplied by a dental prosthetic appliance. The author reviews the literature of such cases, and details the results of his own microscopic investigations into their pathological histology. He concludes that they are of epithelial origin, and that they originate from remnants of embryonic enamel germs, and only rarely, if ever, from epithelial ingrowths occurring later in life. He proposes the term, "Enamelogenous Cysts," in the place of the numerous names heretofore used to designate these tumors.—*The Med. Record*, 1885. July 4.

VI. OSTEO-SARCOMA OF CLAVICLE—REMOVAL. By M. POLAILLON. A previously healthy girl, æt. 16 years, came under M. Polaillon's care for a tumor, evidently involving the right clavicle. It had been noticed for eighteen months as a painless swelling. There was no family history which could throw light on the case. The tumor was as large as one's fist, protruding chiefly upwards and backwards. There were no symptoms of pressure on the vessels or nerves, and but little impairment of movement except that of elevation, any sudden movement, however, was painful.

January 29, 1885, the tumor was excised with the bone by means of a horse-shoe incision running from the outer border of the sterno-mastoid to the acromion, and then over the supra-spinous fossa. There was no great bleeding or other difficulty about the operation, which was done antiseptically. In a fortnight's time the drainage-tube was removed, and the wound healed very rapidly. The shoulder remained slightly depressed and flattened, but the movement was intact.

(M. Tillaux (*Anat. Topogr.*), mentions a case of a Paris waiter who had a false joint in one clavicle, and in whom not the least impairment of movement existed).

The tumor has not yet been examined, but the further history of the case (which I am enabled to give through the kindness of M. Polaillon) leaves little doubt as to its nature. The growth involved the outer half of the bone, and, although the outer three-fourths with the surrounding tissues were removed the patient presented himself with a recurrence beneath the scar at the end of May. June 4, M. Polaillon re-

moved this together with the coracoid process, the acromion and a further piece of the clavicle. The patient has at present done well.—*Gaz. Med.* 1885. April 4.

J. HUTCHINSON, JR. (London).

VII. TRAUMATIC ANEURISM OF AXILLARY ARTERY; LIGATION OF SUBCLAVIAN; RECOVERY. By L. S. MCMURTRY, M.D. Male, æt. 30 years. Pistol shot in right shoulder. Gradual development of swelling in axilla, which at the end of thirteen months was size of a newly-born child's head. Disability of limb from pressure on brachial plexus. Subclavian artery ligated in the third part of its course. Silk. Ligature came away on twenty-first day. Prompt healing of operation wound. Six months later the tumor remained, large and elastic, causing disability of limb. Sac incised after ligation of axillary below tumor. Cavity cleansed of clots and drained. Rapid recovery. The author calls attention to the statistics of Mr. Erichsen, who cites eight cases of axillary aneurism arising from stab or gun-shot wounds which had injured the external tunic of the axillary artery, in which the subclavian had been tied, without a single fatal result.—*Journ. Amer. Med. Assoc.* 1885. July 11.

Bones, Joints, Orthopedic.

I. MULTIPLE FRACTURE IN A SYPHILITIC WOMAN. By M. L. PICQUÉ. The patient, a woman, æt. 57 years, was admitted into the Hôtel Dieu for a fracture of the neck of one femur ($1^1/_2$″ shortening, eversion, swelling, etc.), caused by a fall due to her tripping up.

The tibia of the same side had been broken two years before (also through a fall), and had well united. In the outer third of one clavicle there was said to be a false joint—due, she said, to her leaning her weight on the arms. There had been little pain about it, and no treatment had been adopted, except for "rheumatism." There was no history of syphilis, but she had an ulcer on the forehead which exposed bone and was said to have followed a small lump there two years before.

M. Picqué attributes the fracture to "a syphilitic diathesis" or to "syphilitic osteomyelitis gummata." This case hardly seems a strong one—for setting aside as somewhat doubtful the lesion of the clavicle, there is nothing unusual in a fracture of one femoral neck at 57 years of age, preceded by a fracture of one tibia at 55 years of age.

The author refers to a recent article on syphilitic lesions of bone and their influence on fragility, by M. Gangolphe, but the latter adduces little that is new, so far as we have seen. He believes that there is always a local gumma, etc. (and not mere rarefaction) at the seat of fracture. For a fracture of the clavicle (just beyond the sterno-mastoid) by muscular action—cracking a whip—see *Gazette Médicale*, 1847, p. 618. The patient was a healthy-looking man, æt. 47, who had had syphilis. A more interesting case occurred a few years ago at one of the London hospitals. A man broke one clavicle in raising his child from the ground, and at the seat of fracture was found to be a considerable swelling which was diagnosed to be a malignant tumor. The bone was excised and the supposed tumor proved to be gummatous.

The patient, fortunately, recovered quickly, and had a very useful arm. M. Venot, in the *Gazette Médicale* of 1847, mentions the case of a woman who, whilst under treatment for severe tertiary syphilis, broke one clavicle as she moved her arm quickly behind her back. M. Venot gives two other cases of fractures in syphilitic patients, but as to the relation between the two the reader must form his own opinion. A man, æt. 24 years, suffering severely from acquired syphilis, broke one patella in the act of simply getting into bed. Iodide of potassium and the usual means of adjustment obtained close union. The other case was that of a woman, æt. 27 years, who, being in the hospital for syphilis, had one femur broken by the attendant resting her hand on it—"it snapped like glass." No repair followed, and she died in coma three weeks later. At the post-mortem it was found that the ribs and bones of the forearm would break on the slightest force being used.—*Gaz. Méd.* 1885. May 2.

II. Periostitis Following Typhoid Fever. By Dr. King. Periostitis During Typhoid Fever. By Dr. Affleck. The distinction between these two titles is obvious. The first case agrees with those described by Sir J. Paget (*Clinical Lectures*, 1879, p. 397) in occurring during convalescence from the fever which had lasted eight weeks in an artisan, æt. 29 years. The right tibia was the bone affected. There was much swelling and pain along the whole leg. An incision was made and a drainage tube inserted, but though the symptoms seemed markedly relieved by these measures, there is no evidence as to the presence of suppuration or of threatened necrosis. In three weeks the part was almost well. It will be remembered that Sir. J. Paget (and in this M. Mercier agrees with him) deprecates the use of incisions, especially when the ribs are the bones affected, but both admit that necrosis may follow in the case of other bones. Paget says he has not observed periostitis to occur except during convalescence or later, but Dr. Affleck's three cases were all noticed during the fever; two in the third week, the other in the fifth. The tibia was alone affected in one. The tibia and humerus in another, the humerus alone in the third. Spontaneous resolution occurred in two cases (after a considerable time had elapsed), but an abscess formed over the humerus in one and required evacuation. It would seem advisable in these cases to relieve tension and pain by an incision, using full antiseptic precautions.

Dr. Affleck has seen periostitis follow typhoid more frequently than "swelled leg," his three cases occurred in a total of 117 treated at the Edinburgh Infirmary.—*Brit. Med. Journ.* 1885. May 9. J. Hutchinson, Jr. (London).

III. Four Cases of Suppuration after Brisement Forcé. By Prof. M. Oberst (Halle). As to the ultimate fate of specific disease-germs in the body there are three possibilities:

1. They may be thrown off in excretions, pus, etc.

2. They may perish in the body or form products fatal to themselves, as is the case with bacteria of alcoholic fermentation and of putrefaction.

3. They may remain dormant in the body, in which case there is danger that,

sooner or later, conditions will become favorable for their developing into fresh activity. In this way, perhaps, we have to explain the latency of tubercular epiphyseal deposits for years, when they suddenly, *e. g.*, after slight traumatism, start up anew at points where the former trouble had long since subsided. The like occurs after acute infectious osteomyelitis, a typical relapse appearing years after the usual time of life.

He thus classes several unfortunate cases of brisement forcé.

1. Woman, æt. 26 years. Three years before, fever, severe pain in joints, etc., leading to stiffness and deformity. Extension, massage, baths, etc., achieved little. Forcible correction of position of the left ankle, knee, elbow and wrist joints. Not the least injury to integument. Fever began same day. Large abscesses, containing fetid pus, formed about upper end of left femur. Extensive blood extravasations about left elbow. Death from exhaustion six weeks after brisement. Autopsy showed a fracture of the left femur a few inches below trochanter, and an osteomyelitic sequestrum, also other osteomyelitic abscesses in same bone.

2. Girl, æt. 19 years. Attacked four and a half years before with typical osteomyelitis of left tibia. Both legs said to have early assumed a bad position. Suppuration continued three years. At present, dislocation of right hip, ankylosis of left knee, etc. Forcible extension of knee, skin not injured. Next day fever, then pain in left knee extending into the thigh and swelling of same region. Abscess opened six weeks after the operation; pus hæmorrhagic but not putrid; bone bared of its periosteum. It became necessary to amputate left thigh. Cure by first intention.

3. Man, æt. 21. In 1875, and twice in 1876 rheumatic attacks affecting nearly all the joints of the extremities and leaving severe deformities. No joint suppurated. Only the ankle-joint could be broken up. Cracking and snapping sounds indicated that bone may have been infracted and broken. On the sixteenth day increasing pain in right foot, and fever. On removing plaster bandage phlegmonous swelling and fluctuation below internal malleolus. It healed out three weeks after incision.

4. Man, æt. 23 years. Acute, painful febrile swelling of right knee. Relapse. Ankylosis. Brisement seven months after commencement of the trouble; skin preserved intact. Severe pain and fever next day. Suppuration. Incision. Cure. Microscope and cultures showed only the yellow pus staphylococcus.

He advises great caution in the forcible breaking up of ankyloses from acute infectious troubles. He has not met with similar mishaps on stretching apparently cured tubercular joint affections.